

Appl. No. 10/018,018
Amdt. Dated February 25, 2004
Reply to Office action of August 25, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13 (canceled)

14. (previously presented) In a method of interventional or intraoperative MRI wherein an invasive device is inserted into the vasculature of a human or non human animal body or through vascularised tissue in said body and an MR image of at least a part of said body containing said device is generated, the improvement comprising administering a blood pool contrast agent into the vasculature of said body, either by direct injection of the blood pool contrast agent through said device or by i.v. injection of the blood pool contrast agent directly into the body.

15. (previously presented) The method of claim 14 wherein said device is selected from the group consisting of catheters, balloons, optical fibres, guide wires, needles, biopsy needles, electrodes, electrode leads, implants, stents and stent grafts.

16. (previously presented) The method of claim 14 wherein said blood pool contrast agent comprises compounds selected from the group consisting of MS-325, carboxymethyl dextran GdDTPA conjugates, GdDTPA polylysine conjugates, cascade polymers, dendrimer polymers, superparamagnetic iron oxides, ultrasmall superparamagnetic iron oxides and carbohydrate stabilised iron oxide particles.

17. (previously presented) The method of claim 16 wherein said blood pool contrast agent comprises superparamagnetic iron oxide particles having on their surfaces degraded starch.

18. (previously presented) The method of claim 17 wherein said blood pool contrast agent further comprises a hydrophilic polymer.

19. (previously presented) The method of claim 18 wherein said hydrophilic polymer is a functionalized polyalkylene oxide.
20. (currently amended) The method of claim 13 wherein a difference in at least one parameter chosen from T_1 , T_2 and T_2^* between the blood and said device is utilized to generate image contrast between the blood and said device.
21. (currently amended) The method of claim ~~13~~¹⁴ wherein said device is filled with a diamagnetic material or a paramagnetic material
22. (previously presented) The method of claim ~~13~~¹⁴ wherein said blood pool contrast agent enhances T_1 and/or T_2^* relaxation properties of the blood relative to that of said device.
23. (previously presented) The method of claim 22 wherein the T_1 relaxation property of the blood is enhanced relative to said device; T_1 -weighted sequences are used and said device is filled with diamagnetic material so that the blood appears bright in said image, relative to said device.
24. (previously presented) The method of claim 22 wherein the T_2^* relaxation property of the blood is enhanced relative to said device; T_2^* -weighted sequences are used and said device is filled with paramagnetic material so that said device appears bright in said image, relative to the blood.
25. (currently amended) The method of claim ~~13~~¹⁴ wherein said device is not marked with a magnetic susceptibility agent.